

**Mission Summary**  
990911I Aircraft 43RF  
Floyd  
**Synoptic Flow Mission**

Scientific Crew (43RF)

Lead Scientist/Radar	C. Landsea
Radar	N. Dorst
Dropsonde	H. Willoughby
Workstation	P. Leighton

*Mission Briefing:*

Synoptic flow mission in conjunction with NOAA 42 (no G-IV available). One penetration through the storm planned. 15 drops total for synoptic, a few more in eyewall/rainbands.

*Mission Synopsis:*

Very successful synoptic flow mission. Of 17 total drops, only one failure. One radar composite sent to NHC. Two of 17 drops were eyewall, one in the SE (but not much of an eyewall there) and one in the NW. No cloud physics available. Radar worked well, but with only one penetration only a single composite was done (and sent, Fig. 1). The original drops number 14 and 15 were slightly moved to north and east to be able to get them processed and sent before 43 was over land.

*Evaluation:*

Mission was a success, but numerous instrumentation/data system crashes (data system-flight level, SFMR, ASDL) would have been terminal if it was any mission besides synoptic flow. The good news was that the sondes worked well and that the radar composite was transmitted. (Sidenote: fantastic display of St. Elmo's fire late in the mission while going through graupel.)

*Problems:*

1. Is there really a rule saying the no minobs can be sent while the plane is flying over land? If so, this should be altered (in the NHOP?). We had to alter positioning of last two drops to get them processed and sent in time.
2. Data system freeze ups - 18:22 to 18:28, 20:41 to 20:51, 20:55 to 21:15.
3. SFMR down: 19:55 to 21:15, 23:17 to end of flight.
4. ASDL down: 21:32 to 23:40.
5. Data display down: 20:55 to 21:37.

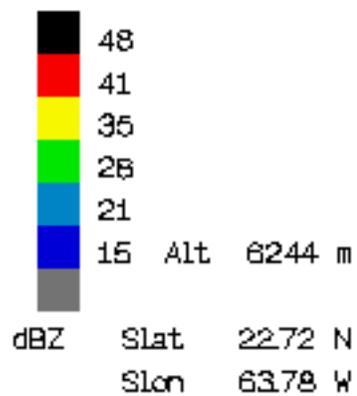
Chris Landsea

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FLOYD

222247 Z to  
224838 Z

Figure 1



360 X 360 km

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